

Lab Pro/Logger Pro Primer

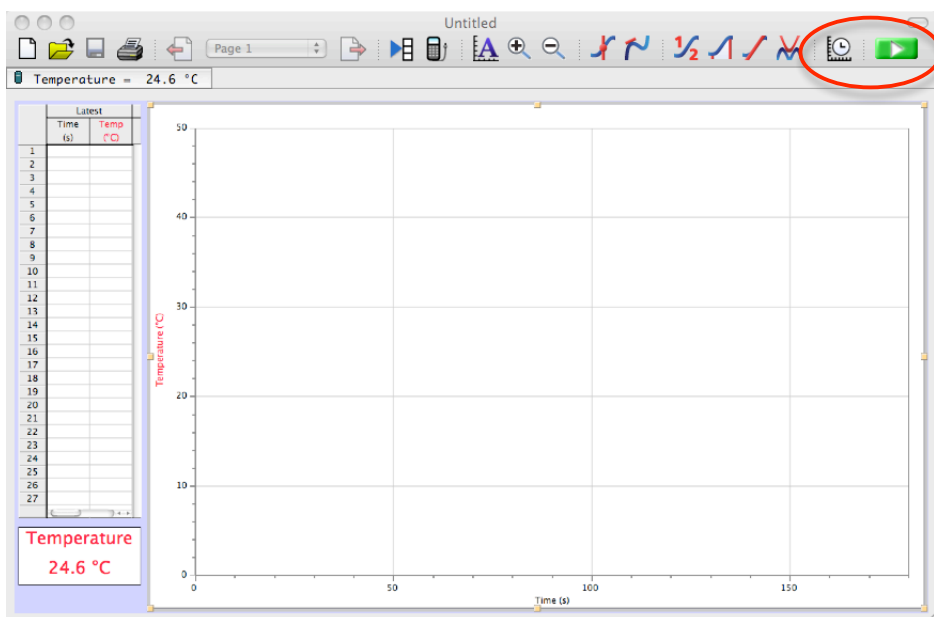
When the Lab Pro is first powered up, you should hear some beeps and see some lights flash. This means the Lab Pro is operating properly. If you open one of the experiment files from a Vernier lab book, it will be configured for the experiment in the book. You may also easily configure an experiment yourself.

When a probe is plugged into the Lab Pro, it should Auto ID and open a window specific to that probe. The example to the right is one for a temperature probe. The green button at the top right will start the experiment.

(These screenshots are from a Mac, but Windows will look similar.)

The default setting will be a **Time Based** experiment, which means that the data will be collected over time. If you wish to change the time that the experiment will last, or to change to a different mode, click on the icon that looks like a clock.

The clock icon opens a Data Collection window. The example to the right is for a **Time Based** experiment. You can easily change the length of the experiment and the **Sampling Rate** (how often it takes a sample). The example to the right collects 2 samples/sec. and lasts for 180 sec. It will automatically stop at the end of that time (or you can manually stop it at any time). You can also change the time unit (seconds, minutes, hours etc.).



Data Collection

Collection | Triggering

Mode: Time Based

Length: 180 seconds

☐ Continuous Data Collection

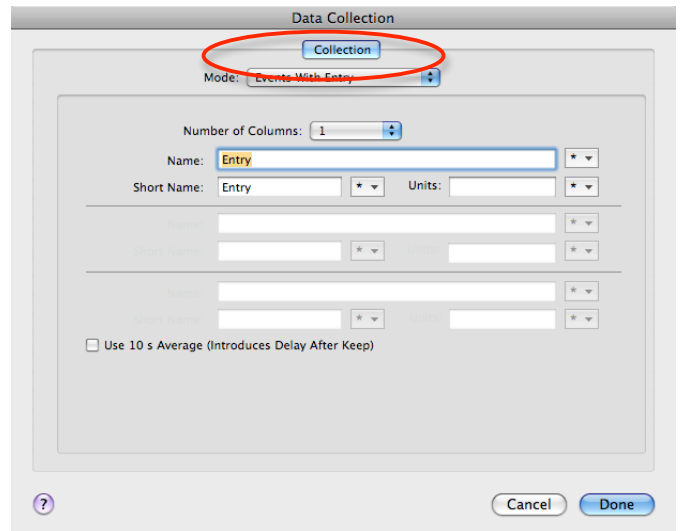
Sampling Rate: 2 samples/second 0.5 seconds/sample

☐ Oversampling

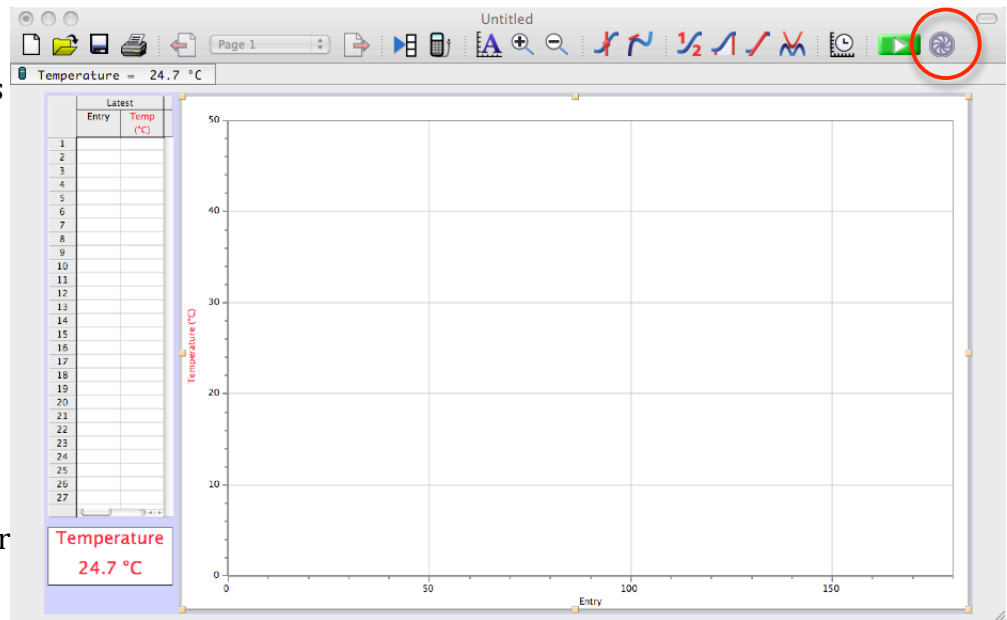
Samples to be Collected: 361

Cancel Done

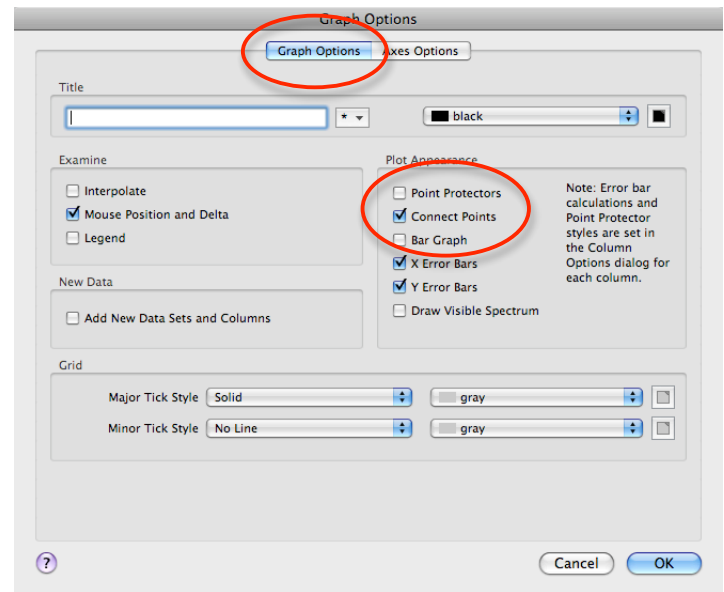
There are times that you will not want to collect data over time. The **Events with Entry** mode is another popular way to gather data. In this mode, the probe will collect a data point when you tell it to and then you will be prompted for an “entry” which will be plotted on the X axis. An example of this would be Boyle’s Law, where the pressure sensor would measure pressure and you would be prompted to enter the volume.



When you select the **Events with Entry** mode, a new icon appears in the menu bar directly to the right of the green Start button. When you click this **Keep** button, it will collect a sensor reading and then prompt you for an entry. Then you can proceed to the next data point. Be sure and click the red stop button after you have finished collecting all your data points.



If you double click anywhere on the graph, a **Graph Options** dialog box appears. This allows you to customize the way the graph appears. It is often desirable to see only the data points. A scatterplot can be obtained by deselecting **Connect Points** and then selecting **Point Protectors**.



Also available on the **Graph Options** window is **Axes Options**. This allows you to make adjustments to the axes. One of the most used options is **Scaling**. The default setting is **Autoscale**, but you can also **Manually Scale** the graph and **Autoscale from Zero**. Scaling can be applied to each axis separately.

Logger Pro is very powerful and has many options. Many of the options are available from the pull down menus at the top of the page. Feel free to experiment with the various options. The Logger Pro Quick Reference Manual is very helpful and is a free download from the Vernier web page.

